

## Chapter 3 Alaska Nike Defenses

---



**Figure 5:** Construction workers pouring concrete ---Site Summit. National Archives and Records Administration. RG 77.

When Alaska was scheduled for Nike Hercules defenses in 1955, the Army originally planned to station three Nike battalions in Alaska, with eight sites in Fairbanks and three in Anchorage. The areas identified for protection were Eielson AFB and Ladd AFB in Fairbanks, and Elmendorf AFB in Anchorage. Four batteries were to surround each Fairbanks Air Force base.<sup>9</sup> Due to required manpower reductions in the Alaskan theater the Army was forced to cut one battalion from the proposed defenses. The Army chose to delete the Ladd AFB battalion, as Eielson AFB was assigned a higher protection priority. It was requested that one battery from the cancelled battalion, Site Love, be constructed regardless, since protection of both Air Force bases had been planned as an integrated defense. Site Love was needed to ensure that these defenses were not affected by the battalion reduction. The Army agreed, and Site Love was built to complement the firepower of the four batteries surrounding Eielson AFB.<sup>10</sup> The battery was quite a distance from the other four sites, and it was the only site situated north of the Chena River.<sup>11</sup>

Of the 145 Nike Hercules batteries ultimately deployed in the United States, only thirty-five sites were designed specifically for the Hercules system, and this included the eight Alaskan batteries. All the other sites were converted Ajax batteries.<sup>12</sup> At first the decision that Alaska was to receive Nike Hercules defenses was shrouded in mystery. Though plans were reported in local

---

<sup>9</sup> Ladd Air Force Base was transferred to the Army in 1961 and renamed Fort Wainwright.

<sup>10</sup> Alaskan Command Annual JCS History. 1 January – 31 December 1959. Prepared by the Office of Chief Information, Alaskan Command. 41-44. Elmendorf AFB History Office, ALCOM Histories.

<sup>11</sup> As Alaska's Hercules defenses were being reduced, so too were anticipated Air Force Thor missile sites. In the early 1950's the Air Force had planned to deploy five intermediate range ballistic missile sites around Anchorage. Real estate planning and design was all but completed for batteries at Pioneer Peak, Eklutna, Eagle River, Bird Creek, and Girdwood when the program was abruptly cancelled.

<sup>12</sup> Lonquest, and Winkler, *To Defend and Deter*, 177.



<b>Anchorage</b> 4 <sup>th</sup> Missile* Battalion, 43d Artillery	<b>Battery</b>	<b>Name</b>
	A (Dual Site)	Point
	B	Summit
	C	Bay
<b>Fairbanks</b> 2 <sup>nd</sup> Missile Battalion, 562d Artillery	A	Tare
	B	Peter
	C	Mike
	D	Jig
	E	Love

\*4<sup>th</sup> Missile Battalion redesignated 1<sup>st</sup> Missile Battalion in 1972



**Figure 6:** Battery control building under construction, Site Summit. National Archives & Records Administration. RG 77, U.S. Army Corps of Engineers.

newspapers, site locations and the number of batteries to be built were kept secret.<sup>13</sup> As time passed, however, this covert approach diminished.

The Nike Hercules system was a ground-based anti-aircraft defense that used guided missiles to destroy planes. A series of radars and computers identified and tracked targets, and guided the missiles to the point of detonation. Batteries were composed of two areas including a launch site where missiles were actually fired, and the Integrated Fire Control area, where radars and control operations were located. Alaska's Nike sites were designed to protect the Air Force bases, and there were several reasons for having multiple batteries guarding a single location.<sup>14</sup> First, the best way to strategically defend an area is through a ringed defense. Second, each Nike battery had a dead zone; a four-mile radius around the launch facilities where its missiles could not reach. Third, multiple batteries allowed sites to regularly stand down for deep maintenance while others carried the burden of being on high alert.<sup>15</sup>

Sites were built as small self-contained communities with power systems, housing, and water and fuel supplies. Construction of

Alaska's Nike sites required careful planning and design to ensure weather and terrain conditions did not slow the process. The U.S. Army Corps of Engineers headed the construction effort and awarded a \$9,495,744.00 contract to Patti McDonald Co. and M-B Contracting Co. for construction of the Anchorage Nike sites in 1957. Peter Kiewit Son Co. acquired the \$12,771,000.00 contract to construct four of the Fairbanks Nike sites, also in 1957. Then in 1958 B-E-C-K Constructors received a \$3,033,000.00 contract to build Site Love.

<sup>13</sup> "Missiles to Give Added Local Defense" *Anchorage Daily News*, 11 Aug. 1955, and "Guided Missile Stations will Be Erected Around Fairbanks: Land Now Being Taken Over for Sites; Rockets Will Be Launched from Secret Bases; No Word on Location or Number" *Fairbanks Daily News Miner*, 11 Aug. 1955.

<sup>14</sup> It is often stated that the Alaskan Nike sites were built to protect the cities of Anchorage and Fairbanks. However, early Alaskan Command documents discussed the relative strategic values of Elmendorf, Eielson and Ladd AFB to determine which area would receive deployment priority. There are no references concerning which city was deserving of a higher protection value. Also, a quick study of the Nike battery locations shows them to be triangulated around Elmendorf AFB and Eielson AFB. The system would have offered some default protection of Anchorage and Fairbanks, but urban protection in Alaska was likely an ancillary, indirect function.

<sup>15</sup> Christina M. Carlson and Christine Whitacre, *Last Line of Defense: Nike Missile Sites in Illinois*, Denver, Colorado, National Park Service, 1996. 40.





**Figure 7:** Site Summit launch building before installation of rails and launcher. Courtesy Bill Momsen.



**Figure 8:** Site Summit, installation of launcher and rails. Note crewman with broom - an essential tool, according to Billy Momsen. Courtesy Bill Momsen.

After contractors built the battery buildings, Army personnel installed the technical equipment and turned the sites into functioning batteries. Bill Momsen, with the 194<sup>th</sup> Ordnance Detachment, helped set up the launch area on Site Summit in 1958 and 1959. He remembered the crew's first task was to plow snow off the launch pads, and heat the concrete to drill holes for the launch frame's lag bolts. Heating the concrete was accomplished with gasoline heaters and tarps, which had an inconvenient tendency to catch fire.<sup>16</sup> All the batteries became operational in 1959 except for Site Love, which was not ready until 1960.<sup>17</sup>

The eight Alaskan Nike sites were basically the same except for Site Point (A Battery), in Anchorage. Site Point was a double site with four launch buildings, and two composite battery control buildings with all the associated radars. The site operated as two separate batteries under two units. At Site Point a Major commanded the batteries, in contrast to the typical Alaskan Nike site, which was controlled by a Captain. Site Point operated as a double battery until 1970 when budget cuts forced one battery to decommission. The extra space was then used to house the southern Army Air Defense Command Post, which was being relocated from the AC&W and NORAD control center at Fire Island.<sup>18</sup>

The Fire Island facilities were also decommissioned for budgetary reasons.

Though the layout and facilities of each battery were fundamentally similar, the building and working conditions at each site were not. Site Summit, at the top of the Chugach Range 4,000-feet above sea level, was the most difficult Alaskan battery to construct. Sixty vertical feet were blasted off the mountaintop to raze a platform for the battery control building and radars. Blast holes were located at 5-foot intervals with a depth ranging from 16 inches to 24 feet. The holes were loaded with 1½ cartridges of Atlas dynamite. Over 25,000 cubic yards of rock were removed from the site. Usable material blasted from the peak was recycled for road and area fill.

<sup>16</sup> Bill Momsen, correspondence with Kristy Hollinger, June 2004.

<sup>17</sup> Denfeld, *Nike Hercules in Alaska*, 5.

<sup>18</sup> Historical Report, 1 January 1968 – 30 June 1968. 626<sup>th</sup> Aircraft Control and Warning Squadron Fire Island Air Force Station, Alaskan Air Command. Elmendorf AFB History Office, Fire Island.



Excess rubble was bulldozed off the mountainside. The mountaintop weather hindered construction crews somewhat. Visibility was often so poor that, “driving to the day’s work through a sunny summer day, they would be engulfed in fog layers so thick ‘you could put out your hand and move it.’”<sup>19</sup> The battery’s unique location added approximately twenty percent to the average battery construction costs.

Site Summit was subject to very extreme weather conditions due to its location at the top of the Chugach Mountains. Snow, fog, and high winds frequently socked in the site. The Integrated Fire Control (IFC) building was anchored to the ground by six feet square four feet thick concrete pads with encased steel rods.<sup>20</sup> Even so, as Billy Badger recalled, “that site took a beating. I sat there one day during lunch next to the window and if you noticed it had these huge beams that went down into the rock I guess to anchor the buildings up there so they wouldn’t be blown away. And I could just feel that building shaking and see these girders out there just trembling from the high wind we were having.”



**Figure 9:** Site Summit, Nike missiles on launchers. Courtesy Bill Momsen.

---

<sup>19</sup> E.L. Atkinson, ‘Alaska Contractors Build Difficult Nike Sites’ *Excavating Engineer*. March 1959. 14-16.

<sup>20</sup> E.L. Atkinson, ‘Nike Site Carved from Alaskan Mountain’ *Pacific Building & Engineer*, December 1957.



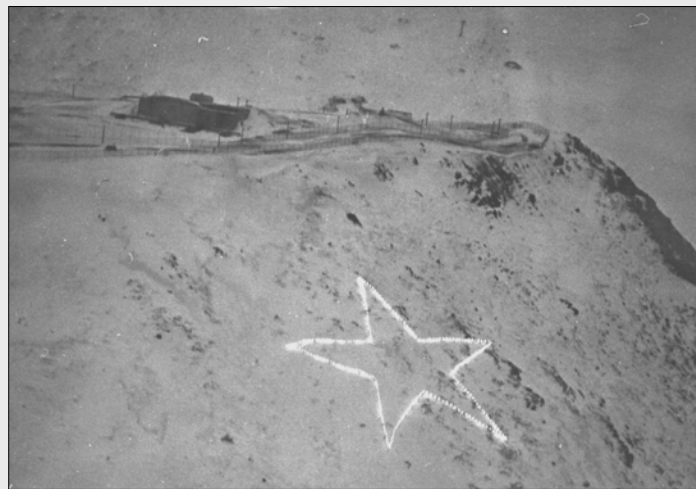
## Site Summit Christmas Star



**Figure 10:** Soldier replaces light bulbs on Christmas star. U.S. Army photo.

Through the years the Christmas Star has served as a highly visible reminder of Site Summit. The star, which shines through the winter months, was the idea of the first Battery Commander, Captain Douglas Evert. He directed battery personnel to build a 15-foot star on the gatehouse as a holiday symbol, and reminder of the site's presence. The star was too small to be viewed in detail from Anchorage, however, and in 1960 a larger star was built.<sup>21</sup> Over the years it was expanded until the existing 300-foot star with 350 60-watt bulbs was built in 1989.

Warrant Officer Joseph Holland remembered performing frequent maintenance on the popular Anchorage landmark. "The star was the launcher area's responsibility," he stated, "So I have walked around that star many times counting the bulbs to make sure that they were burning... And we would always make sure we would light it up and make sure all the bulbs were burning before the big event to light it up, you know, with the rest of Anchorage." Mr. Holland also remembered that the star served as guidepost: "all you had to do was aim for the star and it will bring you back to Fort Rich."

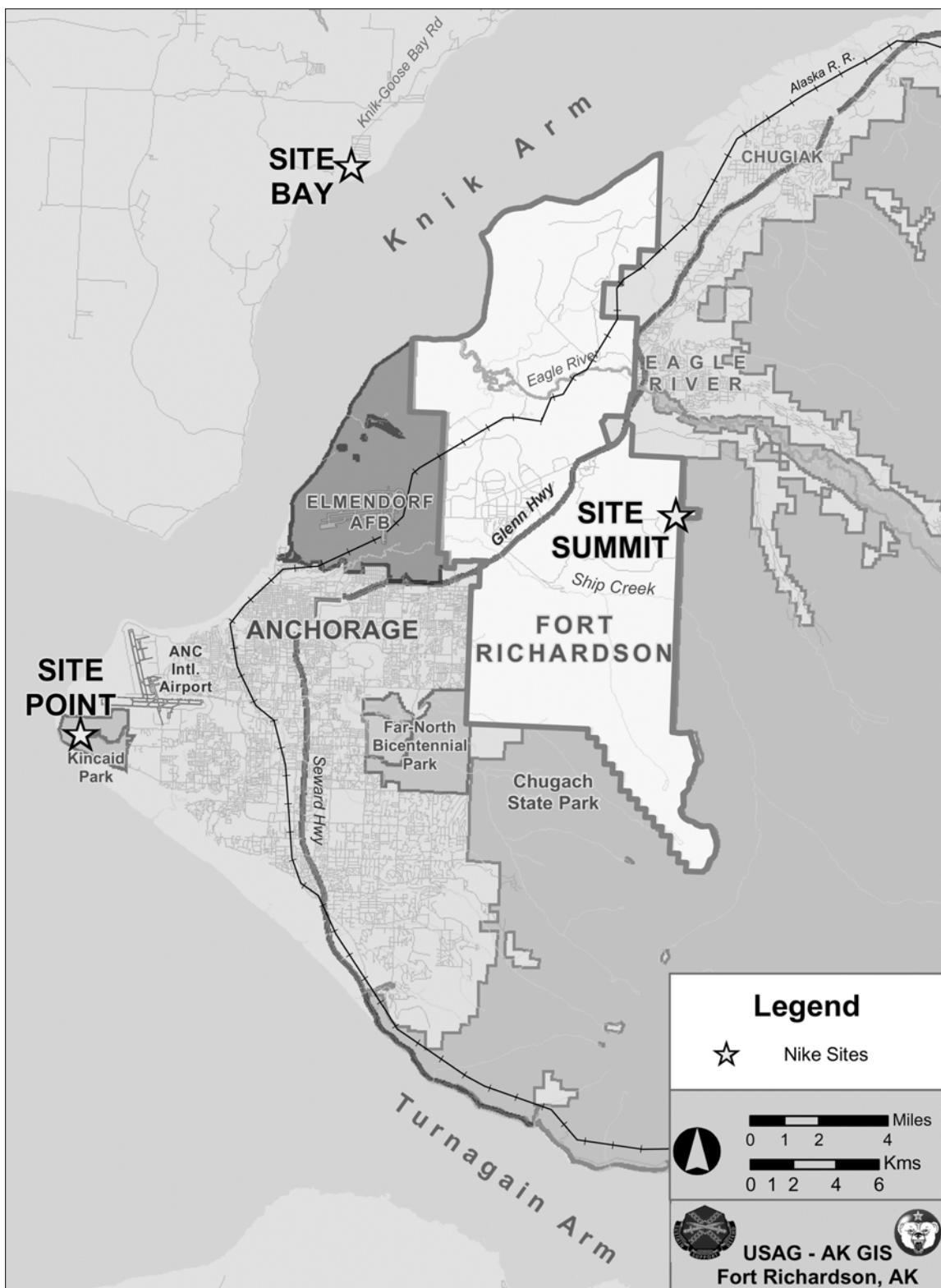


**Figure 11:** Christmas Star below the launch area, Site Summit.  
Photo by Lyman Woodman, U.S. Army.

<sup>21</sup> Denfeld, *Nike Hercules in Alaska*, 20.

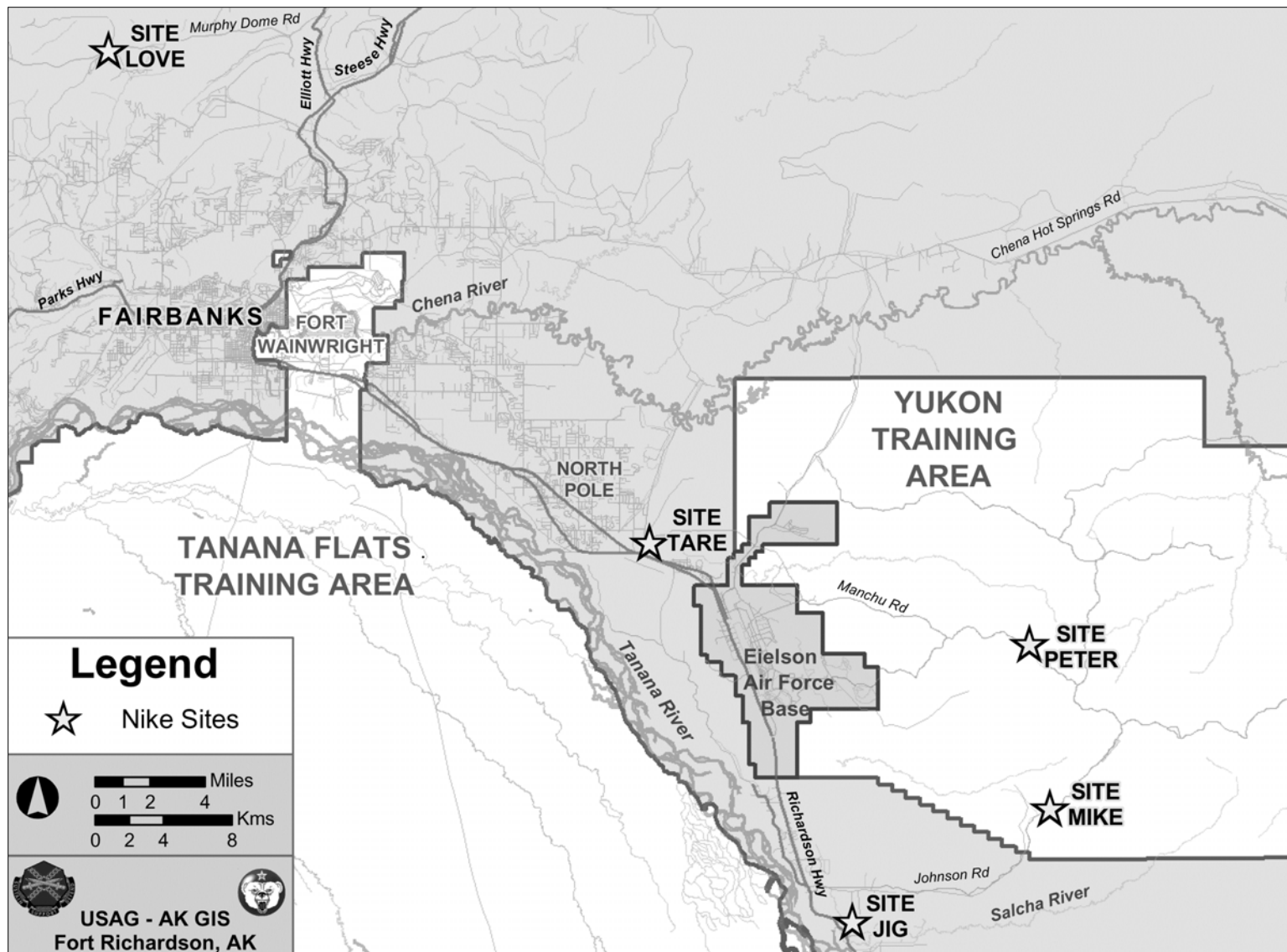






## Anchorage Area Nike Sites





**Fairbanks Area Nike Sites**





**Figure 12:** B Battery IFC area, 1970, Fairbanks. Courtesy Jim O'Connor.



**Figure 13:** Personnel posing in front of guard shack. C Battery, Fairbanks. Courtesy Edward Hogan.

